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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,115	05/30/2001	Yong S. Chen	CLX-701	6532

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EXAMINER	
CHORBAJI, MONZER R	

ART UNIT	PAPER NUMBER
1744	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/870,115	CHEN, YONG S.	
	Examiner	Art Unit	
	MONZER R. CHORBAJI	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-18 and 20-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-18 and 20-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 January 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This non-final action is in response to the RCE/Amendment received on 11/14/05

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 10-13, 18 and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, lines 5 and 7-8, applicant uses the term "dimple-like protrusions". The examiner is unable to construe the meaning of such a limitation since the disclosure teaches that the support means can be leg-like extensions or protrusions or bumps or dimples. In rejecting claim 10, the examiner assumes that the feature "dimple-like protrusions" includes any one of the above-mentioned embodiments. Explanation is needed to understand the meaning of claim 10. The same applies to claims 11-13, 18 and 20-22.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 10, 13, 18 and 20-21 are rejected under 35 U.S.C. 102(b) as being unpatentable by Preato (U.S.P.N. 5,082,176)

With respect to claims 10, 18 and 20-21, the Preato reference, which is in the art of dispensing moisture through the use of conductive heat transfer, teaches the following: a heat-regulating container (figure 3:12) for dispensing humidity (col.1, lines 7-13) into an atmosphere, the container having a flat reservoir with water within it (figure 2:12), an interior bottom surface with interior side walls (figure 1:20, 14, 18 and 16), exterior outer surface of the lower surface (figure 3:outer lower surface 20 of 12) of the container, an interior surface of the lower surface (figure 2: unlabeled inner surface of 20) of the reservoir portion (figure 1: unlabeled volume of 12) and that the lower surface of the reservoir portion integrally contains numerous (i.e., many) dimple-like protrusions (the dimple-like protrusions are represented by the unlabeled regions between indentations 24 in figure 1) in a predetermine pattern in direct contact with the heating surface (figure 3:12 and C) of the heating device (figure 3:E, F and col.2, lines 39-50) such that the dimple-like protrusions define air gaps (indentations 24 in figure 1) between the lower surface of the reservoir portion and the heating surface (C) of the heating device are created (col.2, lines 9-13).

With respect to claim 13, the Preato reference in figure 3 shows the container (12) resting flat against the heating surface (c) of the heating device (E). This indicates that the dimple-like protrusions have a predetermined length or height; otherwise, the container would be resting, for example, in a tilting fashion.

5. Claims 10, 13, 18 and 20-21 are rejected under 35 U.S.C. 102(b) as being unpatentable by Watson (U.S.P.N. 2,081,078).

With respect to claims 10, 18 and 20-21, the Watson reference discloses a container (10) with a reservoir capable of holding material where the lower surface of the container contains many dimple-like protrusions (13) integrally formed in a pre-determined pattern. The container is capable of being directly placed on a heating surface where the dimple-like protrusions define multiple air gaps between the lower surface of the container and the heating surface of the heating device (col.2, lines 3-8).

6. Claims 10, 13, 18 and 20-21 are rejected under 35 U.S.C. 102(b) as being unpatentable by Wilson (U.S.P.N. 1,009,816).

With respect to claims 10, 18 and 20-21, the Wilson reference discloses a container (1) with a reservoir where the lower surface of the container contains dimple-like protrusions (2) integrally formed in a pre-determined pattern. The container is capable of being directly placed on a heating surface where the dimple-like protrusions define multiple air gaps between the lower surface of the container and the heating surface of the heating device (col.1, lines 43-51).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Preato (U.S.P.N. 5,082,176) in view of Flashinski et al (U.S.P.N. 6,031,967).

With respect to claims 14-16, the Preato reference fails to teach the following: closure means includes an impermeable film, closure includes a semi-permeable membrane and the closure includes a permeable membrane. The Flashinski reference teaches the following: closure means includes an impermeable film (col.3, lines 4-5), closure includes a semi-permeable membrane (col.2, line 65) and the closure includes a permeable membrane (col.2, line 65). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the water in the container of the Preato reference with the insecticide of the Flashinski reference by placing a semi-permeable membrane to slow the release of the volatile material as taught by the Flashinski reference (col.3, lines 1-3) so that environments within buildings are maintained insect free over long intervals of time.

With respect to claim 17, the Preato reference fails to teach the use of a volatile insecticide material; however, the Flashinski reference teaches a heat-regulating container (14) for dispensing insecticides (26 and col.3, lines 52-53) into the atmosphere where the reservoir having multiple leg-like protrusions (col.4, lines 21-23) in direct contact with the heating surface (col.3, line 22 and figure 4:30 and 12) where heat is intrinsically transferred from the heating surface to the reservoir through the

multiple protrusions. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the water in the container of the Preato reference with the insecticide of the Flashinski reference so that environments within buildings are maintained insect free.

10. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Preato (U.S.P.N. 5,082,176) in view of Pickford (U.S.P.N. 6,097,017).

With respect to claims 11 and 22, the Preato reference fails to teach a specific number of dimple-like protrusions or the dimple-like protrusions extend completely over the exterior bottom surface. The Pickford reference, which is in the art of designing flat containers, teaches that the number of dimple-like protrusions can be, for example, 18 (figure 1:5) and the dimple-like protrusions extend completely over the exterior bottom surface (figure 3:5 and 6). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the Preato reference by including, for example, 18 dimple-like protrusions as taught by the Pickford reference since more indentations lead to more trapped warm air resulting in an increased efficiency in heating of the container (Preato reference, col.2, lines 9-12).

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Preato (U.S.P.N. 5,082,176) in view of French (U.S.P.N. 3,395,754).

With respect to claim 12, the Preato reference fails to explicitly teach the intrinsic length or height of the dimple-like protrusions; however, the French reference, which is in the art of designing fins (i.e., protrusions) for supplying heat from a heat source to a targeted structure (col.6, lines 15-22), teaches that the fin height is approximately 0.25

inch (equivalent to 6.35 mm). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the length of the dimple-like protrusions of the container of the Preato reference as taught by the French reference in order to conduct heat from the heating surface toward the container of the Preato reference resulting in a heating mechanism (col.6, lines 15-22).

Response to Arguments

12. Applicant's arguments with respect to claims 10-18 and 20-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Fullam (U.S.P.N. 5,827,483) reference discloses the use of dimples on the lower surface of the reservoir and the Vanderlinden (U.S.P.N. 4,768,707) reference discloses the use of protrusions, which are in contact with a heating surface. The Black (US D464,846) reference a pan with dimples at the bottom such that the dimples are capable of holding material.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R. CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD D. CRISPINO can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12/11/2005

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